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Warren D. Hannah
Director, Federal Regulatory Relations
United and Central Telephone Companies

EX PARTE

April 11, 1994

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APR 11 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

RE: Mr. Gregory J. Vogt Data Request (1600C1) in the Expanded Interconnection
Tariff Filings, CC Docket No. 93-162

Dear Mr. Caton:

The United and Central Telephone Companies are filing responses to the data requested in Mr. Gregory J. Vogt's March 11, 1994, letter. The letter requested further cost support in the Expanded Interconnection tariff filings. Mr. Vogt's March 11 letter requested the information to be provided by March 23, 1994. In conversations with Mr. Charles Needy of the Tariff Division staff, the United and Central Companies were allowed to provide the requested information on April 11, 1994, due to requirements of the annual price cap tariff filing and the voluminous nature of the requested information.

The attached information provides all the detail requested in the above referenced letter. Please contact me on the above telephone number with any questions.

Please include this letter and the attached information as part of the record in this proceeding.

Sincerely,

Warren D. Hannah
Director
Federal Regulatory Relations

Attachments

cc: Greg Vogt Charles Needy William Wardwell

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UNITED AND CENTRAL TELEPHONE COMPANIES

DS1 AND DS3 SERVICE OVERHEAD FACTORS

APRIL 11, 1994

In response to Mr. Gregory Vogt's March 11, 1994 letter, the United and Central Telephone Companies provide overhead factors and supporting cost information for DS1 and DS3 special access services. The attached information demonstrates that expanded interconnection customers do not incur a higher proportion of overhead expenses than other special access services. The United and Central filings of expanded interconnection services include overhead factors ranging from 1.78 for one specific interconnection rate element to 1.15 for another specific interconnection rate element. All other expanded interconnection rate elements include overhead factors within this range. However, overhead factors for tariffed special access DS1 and DS3 services range from 2.25 to 6.15.

The following information is submitted:

- o Exhibit A - Derivation of the average length of an interoffice channel utilizing base period 1993 demand. Where no demand existed, an assumed ten miles of interoffice channel mileage was used and one mile for the distance sensitive channel termination associated with United's DS3 special access service.

Exhibit A, pages 4 through 6, displays the overhead factors on a company-by-company basis for DS1 and DS3 services in those states where expanded interconnection services are available. The overhead factors were developed based on special access service rates of March 31, 1994, divided by costs as the result of a cost study performed in March 1994. The United and Central companies do not presently offer discounted volume and term services for special access and provision only on an electrical basis.

- o Exhibit B is a diagram of the material components used in the cost study.
- o Exhibit C is a detailed cost study for DS1 services, by rate element, on a company-by-company basis where expanded interconnection services are provided.
- o Exhibit D is a detailed cost study for DS3 services, by page 2 rate element, on a company-by-company basis where expanded interconnection services are provided.

The costing methodology used to perform cost studies attached as Exhibits C and D, is the same methodology used to calculate the costs for standard DS1 and DS3 special access services and expanded interconnection service. The Commission had previously required the removal of land and building loadings as well as administration and "other taxes" cost components from the expanded interconnection rates originally filed in

February 1993. For comparison purposes, these overhead components were not included in the cost studies at Exhibits C and D.

The costing methodology used by the United and Central companies identifies the investment items required for provisioning a specific service through a detailed engineering and installation assessment. The material requirements for a service are identified through this process and includes the cost of the materials as well as the expense associated with installing the material. Exhibits C and D set forth the unit investment and the installation and engineering labor amounts, by tariff element, that results from this assessment.

The unit investment identified in Exhibits C and D are multiplied by account specific annual cost factors to develop the direct cost components of depreciation, cost of money, income and other taxes, maintenance and administration. The account specific annual cost factors are on a company-by-company basis and are updated annually to recognize changes in expense amounts. The application of the annual cost factors to the investment amounts will ensure recovery of the direct costs associated with providing services in an equitable manner.

Average Circuit Length – DS1

	1993 Base Period Demand		Average*
	CMT	CMF	(CMF/CMT)
<u>United</u>			
CTT	5,322	157,696	30
Florida	5,417	61,753	11
Indiana	903	25,355	28
Ohio	3,890	73,991	19
Eastern	1,700	32,233	19
Midwest	1,595	24,492	15
Southeast	2,731	51,277	19
 <u>Central</u>			
Florida	3,065	13,755	9
Illinois	5,590	20,714	7
Nevada	12,437	43,936	7
N. Carolina	2,053	22,511	22
Virginia	1,548	17,565	23

*Central calc = $CMF / (CMT / 2)$ to reflect application of 2 CMTs per circuit.

Average Circuit Length – DS3

	1993 Base Period Demand		Average*
	CMT	CMF	(CMF/CMT)
<u>United</u>			
CTT	22	1,140	52
Florida	38	2,032	53
Indiana	0	0	10 **
Ohio	32	352	11
Eastern	0	0	10 **
Midwest	0	0	10 **
Southeast	3	24	8
 <u>Central</u>			
Florida	5	21	8
Illinois	139	520	7
Nevada	485	1,292	5
N. Carolina	0	0	10 **
Virginia	0	0	10 **

*Central calc = $CMF / (CMT / 2)$ to reflect application of 2 CMTs per circuit.

**Average circuit length of 10 miles is used where circuit demand equals zero.

**Average DS3 Channel Termination Length
(1/4 mile increments)**

	1993 Base Period Demand		Average (1/4 mi / CT)
	CT	1/4 mi CT	
<u>United</u>			
CTT	86	264	3
Florida	63	39	1
Indiana	0	0	4 *
Ohio	220	1,296	6
Eastern	0	0	4 *
Midwest	18	18	1
Southeast	16	10	1

*Average circuit length of 1 mile is used where circuit demand equals zero.

DS1 Overhead Factors

	<u>Direct Cost</u>	<u>3/30/94 Rate</u>	<u>Overhead Factor (Rate/Cost)</u>	<u>Cost Support Exhibit #</u>
<u>United</u>				
CTT	\$222.70	\$788.10	3.54	C-1
Florida	\$195.28	\$692.80	3.55	C-2
Indiana	\$242.49	\$1,492.22	6.15	C-3
Ohio	\$237.72	\$918.93	3.87	C-4
Eastern	\$188.43	\$731.81	3.88	C-5
Midwest	\$162.01	\$666.89	4.12	C-6
Southeast	\$147.51	\$615.15	4.17	C-8
<u>Central</u>				
Florida	\$186.15	\$1,066.70	5.73	C-9
Illinois	\$143.37	\$599.99	4.18	C-10
Nevada	\$125.60	\$306.34	2.44	C-11
N. Carolina	\$209.81	\$878.98	4.19	C-12
Virginia	\$173.36	\$1,000.69	5.77	C-14

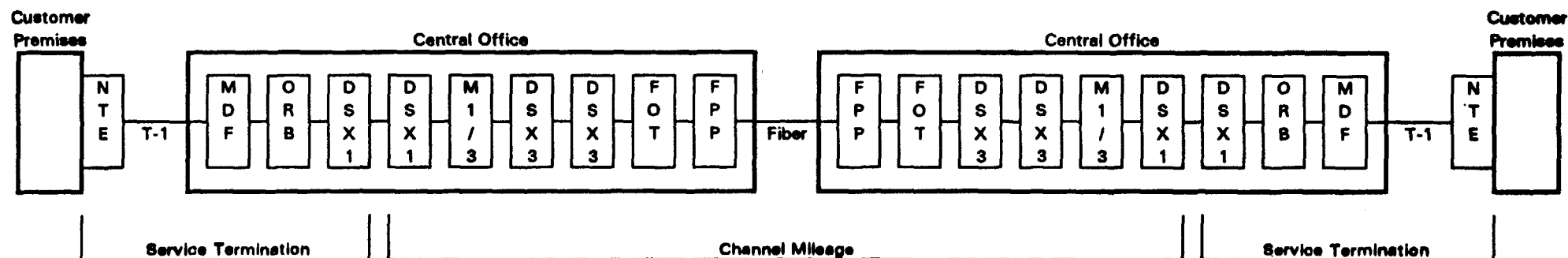
DS3 Overhead Factors – First DS3

	<u>Direct Cost</u>	<u>3/30/94 Rate</u>	<u>Overhead Factor (Rate/Cost)</u>	<u>Cost Support Exhibit #</u>
<u>United</u>				
CTT	\$4,813.04	\$15,359.63	3.19	D-1
Florida	\$8,348.01	\$17,497.95	2.10	D-2
Indiana	\$2,706.96	\$8,629.00	3.19	D-3
Ohio	\$3,340.40	\$8,486.87	2.54	D-4
Eastern	\$2,458.10	\$5,985.00	2.43	D-5
Midwest	\$2,388.78	\$6,804.00	2.85	D-6
Southeast	\$1,791.26	\$5,028.25	2.81	D-8
<u>Central</u>				
Florida	\$2,538.94	\$5,725.20	2.25	D-9
Illinois	\$1,901.46	\$4,181.84	2.20	D-10
Nevada	\$1,195.44	\$2,661.64	2.23	D-11
N. Carolina	\$1,900.87	\$6,917.87	3.64	D-12
Virginia	\$1,739.33	\$7,742.39	4.45	D-14

DS3 Overhead Factors – Additional DS3

	Direct Cost	3/30/94 Rate	Overhead Factor (Rate/Cost)	Cost Support Exhibit #
<u>United</u>				
CTT	\$3,784.25	\$14,060.63	3.72	D-1
Florida	\$7,350.50	\$16,176.95	2.20	D-2
Indiana	\$1,636.04	\$7,183.00	4.39	D-3
Ohio	\$2,317.95	\$7,187.87	3.10	D-4
Eastern	\$1,359.74	\$4,715.00	3.47	D-5
Midwest	\$1,333.33	\$5,376.00	4.03	D-6
Southeast	\$854.02	\$3,808.25	4.46	D-8

DS1 DEDICATED ACCESS SERVICE COMPONENTS



KEY:

DSX-1: DS1 Digital Crossconnect

DSX-3: DS3 Digital Crossconnect

FOT: Fiber Optic Terminal (OC-12)

FPP: Fiber Patch Panel

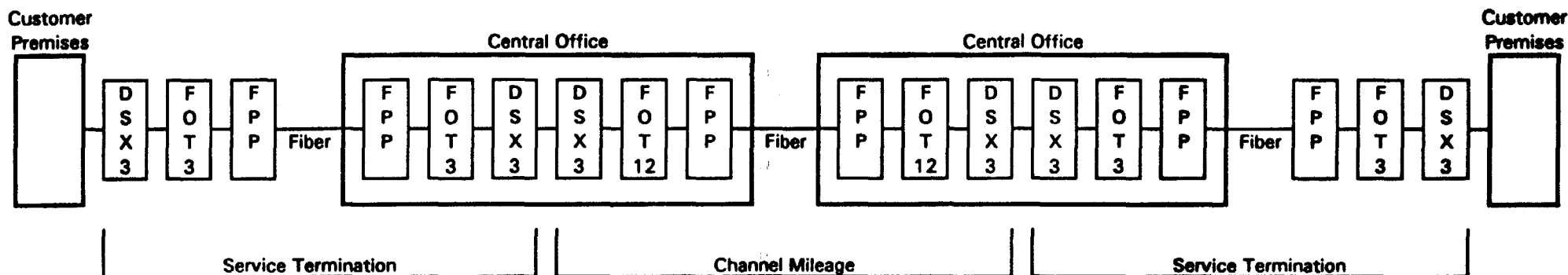
MDF: Main Distribution Frame

M1/3: M1/3 Multiplexer

NTE: Network Termination Equipment

ORB: Office Repeater Bay

DS3 DEDICATED ACCESS SERVICE COMPONENTS



KEY:

- DSX-3:** DS3 Digital Crossconnect
- FOT3:** Fiber Optic Terminal (OC-3)
- FOT12:** Fiber Optic Terminal (OC-12)
- FPP:** Fiber Patch Panel

DS1 DEDICATED ACCESS SERVICE COMPONENTS
Sprint/Carolina Telephone

	(A)	(B)	(C)	(D)	(E)	(F) = (A + (B * C) + (D * E))	(G)	(H)	(I) = (A/G/H)	(J) = (B * C/G/H)	(K) = (D * E/G/H)	(L) = (F/G/H)
Component	Unit Investment	Installation Hours	Rate	Engineering Hours	Rate	Installed Investment	DS1 Capacity	Fill Factor	Unit Capacity Investment Per DS1	Installation Per DS1	Engineering Per DS1	Installed Capacity Investment Per DS1
Network Termination Equipment												
Shelf	\$140	1	\$47.73	0	\$48.46	\$188	12	0.08	\$140.00	\$47.73	\$0.00	\$187.73
Smart Jack	358	1	47.73	0	48.46	406	1	1.00	358.00	47.73	0.00	406.73
Central Office Equipment												
Main Distribution Frame	750	7	47.73	4	48.46	1,278	150	0.90	5.56	2.47	1.44	9.47
Office Repeater Bay - Shelf	1,800	7	47.73	4	48.46	2,328	12	0.90	166.67	30.94	17.95	215.55
Office Repeater Bay - Module	120	1	47.73	0	48.46	168	1	1.00	120.00	47.73	0.00	167.73
DSX-1 Crossconnect - Shelf	250	7	47.73	4	48.46	778	56	0.90	4.96	6.63	3.85	15.44
DSX-1 Crossconnect - Module	57	1	47.73	0	48.46	105	1	1.00	57.00	47.73	0.00	104.73
M1/3 Multiplexer	8,000	25	47.73	20	48.46	10,162	28	0.90	317.46	47.35	38.46	403.27
DSX-3 Crossconnect - Shelf	250	7	47.73	4	48.46	778	448	0.90	0.62	0.83	0.48	1.93
DSX-3 Crossconnect - Module	300	1	47.73	0	48.46	348	28	0.90	11.90	1.89	0.00	13.80
Fiber Optic Terminal: OC-12	35,000	42	47.73	30	48.46	38,458	336	0.90	115.74	6.63	4.81	127.18
Fiber Optic Terminal: 3DS3 Card	4,000	2	47.73	0	48.46	4,095	84	0.90	52.91	1.26	0.00	54.17
Fiber Patch Panel (OC-12)	1,500	4	47.73	4	48.46	1,885	12,096	0.90	0.14	0.02	0.02	0.17
Coax, Jumpers, Tip (OC-12)	1,000	6	47.73	2	48.46	1,383	336	0.90	3.31	0.95	0.32	4.57
Outside Plant Facilities												
Copper T-1	1,144.54	-	-	-	-	1,145	1	1.00	1,144.54	-	-	1,144.54
T-1 Repeater	250.00	-	-	-	-	250	1	1.00	250.00	-	-	250.00
Repeater Housing	700.00	-	-	-	-	700	12	0.90	64.81	-	-	64.81
Fiber - CMF (One Mile, OC-12)	17,160	-	-	-	-	17,160	336	0.90	56.75	-	-	56.75

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/Carolina Telephone

Rate Element: DS1 High Capacity Channel Termination

Component	Unit Capacity Investment Per DS1	Units Required	Total Capacity Investment Per DS1
Circuit Equipment:			
1 Network Termination Equipment - Shelf	\$140.00	1.0	\$140.00
2 Network Termination Equipment - Jack	358.00	1.0	358.00
3 Main Distribution Frame	5.56	1.0	5.56
4 Office Repeater Bay - Shelf	166.67	1.0	166.67
5 Office Repeater Bay - Module	120.00	1.0	120.00
6 DSX-1 Cross Connect - Shelf	4.96	1.0	4.96
7 DSX-1 Cross Connect - Module	57.00	1.0	57.00
8 STM Investment per DS1			852.18
Outside Plant Equipment:			
9 STM Copper T-1	1,144.54	1.0	1,144.54
10 T-1 Repeater	250.00	1.9 *	475.00
11 Repeater Housing	64.81	1.9 *	123.15
12 Total STM Investment			2,594.87

Component	Installed Capacity Investment Per DS1	Units Required	Total Installed Capacity Investment Per DS1
Circuit Equipment:			
13 Network Termination Equipment - Shelf	\$187.73	1.0	\$187.73
14 Network Termination Equipment - Jack	405.73	1.0	405.73
15 Main Distribution Frame	9.47	1.0	9.47
16 Office Repeater Bay - Shelf	215.55	1.0	215.55
17 Office Repeater Bay - Module	167.73	1.0	167.73
18 DSX-1 Cross Connect - Shelf	15.44	1.0	15.44
19 DSX-1 Cross Connect - Module	104.73	1.0	104.73
20 STM Investment per DS1			1,106.37
Outside Plant Equipment:			
21 STM Copper T-1	1,144.54	1.0	1,144.54
22 T-1 Repeater	250.00	1.9 *	475.00
23 Repeater Housing	64.81	1.9 *	123.15
24 Total STM Installed Investment			2,849.06

* Average route requires 1.9 T-1 Repeaters.

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/Carolina Telephone

Rate Element: DS1 High Capacity Channel Termination - Fixed Rate

A. Investment

1. Circuit Equipment Material per DS1	\$852.18	
2. Outside Plant Material per DS1	1,742.69	
3. Total Material Cost (L1 + L2)		\$2,594.87
4. Engineering Labor per DS1	23.23	
5. Installation Labor per DS1	230.96	
6. Total Labor (L4 + L5)		254.19
7. Total Installed Cost (L3 + L6)		2,849.06
8. Net Salvage Value - Material		85.22
9. Net Installed Cost (L7 - L8)		2,763.84

B. Annual Cost		% Total Investment
10. Depreciation	\$283.84	9.96%
11. Non-Recoverable Cost	50.84	1.78%
12. Maintenance	232.77	8.17%
13. Return	165.05	5.79%
14. Federal & State Tax	110.67	3.88%
15. Total Annual Cost (Sum L10..L14)	843.17	29.59%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)	\$70.26
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INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/Carolina Telephone
Rate Element: DS1 High Capacity Channel Mileage

Component	Unit Capacity Investment Per DS1	Units Required	Total Capacity Investment Per DS1
Circuit Equipment:			
1 DSX-1 Crossconnect - Shelf	4.96	2.0	9.92
2 DSX-1 Crossconnect - Module	57.00	2.0	114.00
3 M1/3 Multiplexer	317.46	2.0	634.92
4 DSX-3 Crossconnect - Shelf	0.62	4.0	2.48
5 DSX-3 Crossconnect - Module	11.90	4.0	47.62
6 Fiber Optic Terminal: OC12	115.74	2.0	231.48
7 Fiber Optic Terminal: 3DS3 Card	52.91	2.0	105.82
8 Fiber Patch Panel	0.14	2.0	0.28
9 Coax, Jumpers, Tip	3.31	2.0	6.61
10 CMT Investment per DS1			1,153.13
Outside Plant Equipment:			
11 Fiber - CMF (One Mile)	56.75	1.30 *	73.77
12 Intermediate Office Termination (\$1,153.13 * 3.7 Offices / 51 Miles)**			83.66
13 Net CMF per Mile			157.43

Component	Installed Capacity Investment Per DS1	Units Required	Total Installed Capacity Investment Per DS1
Circuit Equipment:			
14 DSX-1 Crossconnect - Shelf	15.44	2.0	30.87
15 DSX-1 Crossconnect - Module	104.73	2.0	209.46
16 M1/3 Multiplexer	403.27	2.0	806.54
17 DSX-3 Crossconnect - Shelf	1.93	4.0	7.72
18 DSX-3 Crossconnect - Module	13.80	4.0	55.20
19 Fiber Optic Terminal: OC12	127.18	2.0	254.35
20 Fiber Optic Terminal: 3DS3 Card	54.17	2.0	108.35
21 Fiber Patch Panel	0.17	2.0	0.35
22 Coax, Jumpers, Tip	4.57	2.0	9.15
23 CMT Investment per DS1			1,481.98
Outside Plant Equipment:			
24 Fiber - CMF (One Mile)	56.75	1.30 *	73.77
25 Intermediate Office Termination (\$1,481.98 * 3.7 Offices / 51 Miles)**			107.52
26 Net CMF per Mile			181.29

* Route-to-Air ratio

** Average interoffice mileage.

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/Carolina Telephone

Rate Element: DS1 High Capacity Channel Mileage Termination - Fixed Rate

A. Investment

1. Circuit Equipment Material per DS1	\$1,153.13	
2. Outside Plant Material per DS1	0.00	
3. Total Material Cost (L1 + L2)		\$1,153.13
4. Engineering Labor per DS1	96.83	
5. Installation Labor per DS1	232.02	
6. Total Labor (L4 + L5)		328.85
7. Total Installed Cost (L3 + L6)		1,481.98
8. Net Salvage Value - Material		115.31
9. Net Installed Cost (L7 - L8)		1,366.67

B. Annual Cost

		% Total Investment
10. Depreciation	\$148.26	10.00%
11. Non-Recoverable Cost	65.77	4.44%
12. Maintenance	121.08	8.17%
13. Return	89.85	6.06%
14. Federal & State Tax	60.24	4.07%
15. Total Annual Cost (Sum L10..L14)	485.20	32.74%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)

\$40.43

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/Carolina Telephone

Rate Element: DS1 High Capacity Channel Mileage Facility - Per Mile Rate

A. Investment

1. Circuit Equipment Material per DS1	\$83.66	
2. Outside Plant Material per DS1	73.77	
3. Total Material Cost (L1 + L2)		\$157.43
4. Engineering Labor per DS1	0.95	
5. Installation Labor per DS1	2.27	
6. Total Labor (L4 + L5)		3.22
7. Total Installed Cost (L3 + L6)		160.65
8. Net Salvage Value - Material		8.37
9. Net Installed Cost (L7 - L8)		152.29

B. Annual Cost		% Total Investment
10. Depreciation	\$15.67	9.76%
11. Non-Recoverable Cost	0.64	0.40%
12. Maintenance	13.13	8.17%
13. Return	9.51	5.92%
14. Federal & State Tax	6.37	3.97%
15. Total Annual Cost (Sum L10..L14)	45.33	28.21%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)	\$3.78
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DS1 DEDICATED ACCESS SERVICE COMPONENTS
Sprint/United Telephone - Florida

	(A)	(B)	(C)	(D)	(E)	(F) = (A + (B * C) + (D * E))	(G)	(H)	(I) = (A/G/H)	(J) = (B * C/G/H)	(K) = (D * E/G/H)	(L) = (F/G/H)
Component	Unit Investment	Installation Hours	Rate	Engineering Hours	Rate	Installed Investment	DS1 Capacity	Fill Factor	Unit Capacity Investment Per DS1	Installation Per DS1	Engineering Per DS1	Installed Capacity Investment Per DS1
Network Termination Equipment												
Shelf	\$140	1	\$46.41	0	\$55.92	\$186	12	0.08	\$140.00	\$46.41	\$0.00	\$186.41
Smart Jack	358	1	46.41	0	55.92	404	1	1.00	358.00	46.41	0.00	404.41
Central Office Equipment												
Main Distribution Frame	750	7	46.41	4	55.92	1,299	150	0.90	5.56	2.41	1.66	9.62
Office Repeater Bay - Shelf	1,800	7	46.41	4	55.92	2,349	12	0.90	166.67	30.08	20.71	217.46
Office Repeater Bay - Module	120	1	46.41	0	55.92	166	1	1.00	120.00	46.41	0.00	166.41
DSX-1 Crossconnect - Shelf	250	7	46.41	4	55.92	799	56	0.90	4.96	6.45	4.44	15.84
DSX-1 Crossconnect - Module	57	1	46.41	0	55.92	103	1	1.00	57.00	46.41	0.00	103.41
M1/3 Multiplexer	8,000	25	46.41	20	55.92	10,279	28	0.90	317.46	46.04	44.38	407.88
DSX-3 Crossconnect - Shelf	250	7	46.41	4	55.92	799	448	0.90	0.62	0.81	0.55	1.98
DSX-3 Crossconnect - Module	300	1	46.41	0	55.92	346	28	0.90	11.90	1.84	0.00	13.75
Fiber Optic Terminal: OC-12	35,000	42	46.41	30	55.92	38,627	336	0.90	115.74	6.45	5.55	127.73
Fiber Optic Terminal: 3DS3 Card	4,000	2	46.41	0	55.92	4,093	84	0.90	52.91	1.23	0.00	54.14
Fiber Patch Panel (OC-12)	1,500	4	46.41	4	55.92	1,909	12,096	0.90	0.14	0.02	0.02	0.18
Coax, Jumpers, Tip (OC-12)	1,000	6	46.41	2	55.92	1,390	336	0.90	3.31	0.92	0.37	4.60
Outside Plant Facilities												
Copper T-1	1,435.69	-	-	-	-	1,436	1	1.00	1,435.69	-	-	1,435.69
T-1 Repeater	250.00	-	-	-	-	250	1	1.00	250.00	-	-	250.00
Repeater Housing	700.00	-	-	-	-	700	12	0.90	64.81	-	-	64.81
Fiber - CMF (One Mile, OC-12)	27,720	-	-	-	-	27,720	336	0.90	91.67	-	-	91.67

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Florida

Rate Element: DS1 High Capacity Channel Termination

Component	Unit Capacity Investment Per DS1	Units Required	Total Capacity Investment Per DS1
Circuit Equipment:			
1 Network Termination Equipment - Shelf	\$140.00	1.0	\$140.00
2 Network Termination Equipment - Jack	358.00	1.0	358.00
3 Main Distribution Frame	5.56	1.0	5.56
4 Office Repeater Bay - Shelf	166.67	1.0	166.67
5 Office Repeater Bay - Module	120.00	1.0	120.00
6 DSX-1 Cross Connect - Shelf	4.96	1.0	4.96
7 DSX-1 Cross Connect - Module	57.00	1.0	57.00
8 STM Investment per DS1			852.18
Outside Plant Equipment:			
9 STM Copper T-1	1,435.69	1.0	1,435.69
10 T-1 Repeater	250.00	1.9 *	475.00
11 Repeater Housing	64.81	1.9 *	123.15
12 Total STM Investment			2,886.03

Component	Installed Capacity Investment Per DS1	Units Required	Total Installed Capacity Investment Per DS1
Circuit Equipment:			
13 Network Termination Equipment - Shelf	\$186.41	1.0	\$186.41
14 Network Termination Equipment - Jack	404.41	1.0	404.41
15 Main Distribution Frame	9.62	1.0	9.62
16 Office Repeater Bay - Shelf	217.46	1.0	217.46
17 Office Repeater Bay - Module	166.41	1.0	166.41
18 DSX-1 Cross Connect - Shelf	15.84	1.0	15.84
19 DSX-1 Cross Connect - Module	103.41	1.0	103.41
20 STM Investment per DS1			1,103.56
Outside Plant Equipment:			
21 STM Copper T-1	1,435.69	1.0	1,435.69
22 T-1 Repeater	250.00	1.9 *	475.00
23 Repeater Housing	64.81	1.9 *	123.15
24 Total STM Installed Investment			3,137.40

* Average route requires 1.9 T-1 Repeaters.

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Florida

Rate Element: DS1 High Capacity Channel Termination - Fixed Rate

A. Investment

1. Circuit Equipment Material per DS1	\$852.18	
2. Outside Plant Material per DS1	2,033.84	
3. Total Material Cost (L1 + L2)		\$2,886.03
4. Engineering Labor per DS1	26.81	
5. Installation Labor per DS1	224.57	
6. Total Labor (L4 + L5)		251.38
7. Total Installed Cost (L3 + L6)		3,137.40
8. Net Salvage Value - Material		85.22
9. Net Installed Cost (L7 - L8)		3,052.19

B. Annual Cost

		% Total Investment
10. Depreciation	\$312.95	9.97%
11. Non-Recoverable Cost	50.28	1.60%
12. Maintenance	222.13	7.08%
13. Return	181.27	5.78%
14. Federal & State Tax	113.84	3.63%
15. Total Annual Cost (Sum L10..L14)	880.47	28.06%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)	\$73.37
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INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Florida
Rate Element: DS1 High Capacity Channel Mileage

Component	Unit Capacity Investment Per DS1	Units Required	Total Capacity Investment Per DS1
Circuit Equipment:			
1 DSX-1 Crossconnect - Shelf	4.96	2.0	9.92
2 DSX-1 Crossconnect - Module	57.00	2.0	114.00
3 M1/3 Multiplexer	317.46	2.0	634.92
4 DSX-3 Crossconnect - Shelf	0.62	4.0	2.48
5 DSX-3 Crossconnect - Module	11.90	4.0	47.62
6 Fiber Optic Terminal: OC12	115.74	2.0	231.48
7 Fiber Optic Terminal: 3DS3 Card	52.91	2.0	105.82
8 Fiber Patch Panel	0.14	2.0	0.28
9 Coax, Jumpers, Tip	3.31	2.0	6.61
10 CMT Investment per DS1			1,153.13
Outside Plant Equipment:			
11 Fiber - CMF (One Mile)	91.67	2.00 *	183.33
12 Intermediate Office Termination (\$1,153.13 * 1.0 Office / 9 Miles)**			128.13
13 Net CMF per Mile			311.46

Component	Installed Capacity Investment Per DS1	Units Required	Total Installed Capacity Investment Per DS1
Circuit Equipment:			
14 DSX-1 Crossconnect - Shelf	15.84	2.0	31.69
15 DSX-1 Crossconnect - Module	103.41	2.0	206.82
16 M1/3 Multiplexer	407.88	2.0	815.77
17 DSX-3 Crossconnect - Shelf	1.98	4.0	7.92
18 DSX-3 Crossconnect - Module	13.75	4.0	54.99
19 Fiber Optic Terminal: OC12	127.73	2.0	255.47
20 Fiber Optic Terminal: 3DS3 Card	54.14	2.0	108.28
21 Fiber Patch Panel	0.18	2.0	0.35
22 Coax, Jumpers, Tip	4.60	2.0	9.20
23 CMT Investment per DS1			1,490.47
Outside Plant Equipment:			
24 Fiber - CMF (One Mile)	91.67	2.00 *	183.33
25 Intermediate Office Termination (\$1,490.47 * 1.0 Office / 9 Miles)**			165.61
26 Net CMF per Mile			348.94

* Route-to-Air ratio

** Average interoffice mileage.

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Florida

Rate Element: DS1 High Capacity Channel Mileage Termination - Fixed Rate

A. Investment

1. Circuit Equipment Material per DS1	\$1,153.13	
2. Outside Plant Material per DS1	0.00	
3. Total Material Cost (L1 + L2)		\$1,153.13
4. Engineering Labor per DS1	111.73	
5. Installation Labor per DS1	225.61	
6. Total Labor (L4 + L5)		337.34
7. Total Installed Cost (L3 + L6)		1,490.47
8. Net Salvage Value - Material		115.31
9. Net Installed Cost (L7 - L8)		1,375.16

B. Annual Cost

		% Total Investment
10. Depreciation	\$148.26	9.95%
11. Non-Recoverable Cost	67.47	4.53%
12. Maintenance	105.53	7.08%
13. Return	90.33	6.06%
14. Federal & State Tax	56.72	3.81%
15. Total Annual Cost (Sum L10-L14)	468.30	31.42%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)

\$39.03

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Florida

Rate Element: DS1 High Capacity Channel Mileage Facility - Per Mile Rate

A. Investment

1. Circuit Equipment Material per DS1	\$128.13	
2. Outside Plant Material per DS1	183.33	
3. Total Material Cost (L1 + L2)		\$311.46
4. Engineering Labor per DS1	6.21	
5. Installation Labor per DS1	12.53	
6. Total Labor (L4 + L5)		18.74
7. Total Installed Cost (L3 + L6)		330.20
8. Net Salvage Value - Material		12.81
9. Net Installed Cost (L7 - L8)		317.39

B. Annual Cost

% Total
Investment

10. Depreciation	\$28.70	8.69%
11. Non-Recoverable Cost	3.75	1.14%
12. Maintenance	23.38	7.08%
13. Return	19.29	5.84%
14. Federal & State Tax	12.12	3.67%
15. Total Annual Cost (Sum L10..L14)	87.23	26.42%

C. Pricing

16. Monthly Direct Cost (Price Floor) (L15 / 12)

\$7.27

DS1 DEDICATED ACCESS SERVICE COMPONENTS
Sprint/United Telephone - Indiana

Component	(A)	(B)	(C)	(D)	(E)	(F) = (A + (B * C) + (D * E))	(G)	(H)	(I) = (A/G/H)	(J) = (B * C/G/H)	(K) = (D * E/G/H)	(L) = (F/G/H)
	Unit	Installation		Engineering		Installed	DS1	Fill	Unit Capacity Investment Per DS1	Installation Per DS1	Engineering Per DS1	Installed Capacity Investment Per DS1
	Investment	Hours	Rate	Hours	Rate	Investment	Capacity	Factor				
Network Termination Equipment												
Shelf	\$140	1	\$46.17	0	\$46.73	\$186	12	0.08	\$140.00	\$46.17	\$0.00	\$186.17
Smart Jack	358	1	46.17	0	46.73	404	1	1.00	358.00	46.17	0.00	404.17
Central Office Equipment												
Main Distribution Frame	750	7	46.17	4	46.73	1,260	150	0.90	5.56	2.39	1.38	9.33
Office Repeater Bay - Shelf	1,800	7	46.17	4	46.73	2,310	12	0.90	166.67	29.93	17.31	213.90
Office Repeater Bay - Module	120	1	46.17	0	46.73	166	1	1.00	120.00	46.17	0.00	166.17
DSX-1 Crossconnect - Shelf	250	7	46.17	4	46.73	760	56	0.90	4.96	6.41	3.71	15.08
DSX-1 Crossconnect - Module	57	1	46.17	0	46.73	103	1	1.00	57.00	46.17	0.00	103.17
M1/3 Multiplexer	8,000	25	46.17	20	46.73	10,089	28	0.90	317.46	45.80	37.09	400.35
DSX-3 Crossconnect - Shelf	250	7	46.17	4	46.73	760	448	0.90	0.62	0.80	0.46	1.89
DSX-3 Crossconnect - Module	300	1	46.17	0	46.73	346	28	0.90	11.90	1.83	0.00	13.74
Fiber Optic Terminal: OC-12	35,000	42	46.17	30	46.73	38,341	336	0.90	115.74	6.41	4.64	126.79
Fiber Optic Terminal: 3DS3 Card	4,000	2	46.17	0	46.73	4,092	84	0.90	52.91	1.22	0.00	54.13
Fiber Patch Panel (OC-12)	1,500	4	46.17	4	46.73	1,872	12,096	0.90	0.14	0.02	0.02	0.17
Coax, Jumpers, Tip (OC-12)	1,000	6	46.17	2	46.73	1,370	336	0.90	3.31	0.92	0.31	4.53
Outside Plant Facilities												
Copper T-1	883.50	-	-	-	-	884	1	1.00	883.50	-	-	883.50
T-1 Repeater	250.00	-	-	-	-	250	1	1.00	250.00	-	-	250.00
Repeater Housing	700.00	-	-	-	-	700	12	0.90	64.81	-	-	64.81
Fiber - CMF (One Mile, OC-12)	22,440	-	-	-	-	22,440	336	0.90	74.21	-	-	74.21

INTERSTATE ACCESS SERVICE RATE DEVELOPMENT

Company: Sprint/United Telephone - Indiana
Rate Element: DS1 High Capacity Channel Termination

Component	Unit Capacity Investment Per DS1	Units Required	Total Capacity Investment Per DS1
Circuit Equipment:			
1 Network Termination Equipment - Shelf	\$140.00	1.0	\$140.00
2 Network Termination Equipment - Jack	358.00	1.0	358.00
3 Main Distribution Frame	5.56	1.0	5.56
4 Office Repeater Bay - Shelf	166.67	1.0	166.67
5 Office Repeater Bay - Module	120.00	1.0	120.00
6 DSX-1 Cross Connect - Shelf	4.96	1.0	4.96
7 DSX-1 Cross Connect - Module	57.00	1.0	57.00
8 STM Investment per DS1			852.18
Outside Plant Equipment:			
9 STM Copper T-1	883.50	1.0	883.50
10 T-1 Repeater	250.00	1.9 *	475.00
11 Repeater Housing	64.81	1.9 *	123.15
12 Total STM Investment			2,333.84

Component	Installed Capacity Investment Per DS1	Units Required	Total Installed Capacity Investment Per DS1
Circuit Equipment:			
13 Network Termination Equipment - Shelf	\$186.17	1.0	\$186.17
14 Network Termination Equipment - Jack	404.17	1.0	404.17
15 Main Distribution Frame	9.33	1.0	9.33
16 Office Repeater Bay - Shelf	213.90	1.0	213.90
17 Office Repeater Bay - Module	166.17	1.0	166.17
18 DSX-1 Cross Connect - Shelf	15.08	1.0	15.08
19 DSX-1 Cross Connect - Module	103.17	1.0	103.17
20 STM Investment per DS1			1,097.99
Outside Plant Equipment:			
21 STM Copper T-1	883.50	1.0	883.50
22 T-1 Repeater	250.00	1.9 *	475.00
23 Repeater Housing	64.81	1.9 *	123.15
24 Total STM Installed Investment			2,579.65

* Average route requires 1.9 T-1 Repeaters.